

WHAT IS CLAIMED IS:

1. A switch device, comprising a male assembly, and a female assembly, wherein:

the male assembly includes a first fixing seat, a first operation socket,

5 a first locking seat, and a retractable rod, wherein:

the first fixing seat of the male assembly has a side provided with a plurality of flexible locking hooks each having a distal end formed with a wedge-shaped catch portion;

the first operation socket of the male assembly is mounted on the first
10 fixing seat and has a periphery formed with a plurality of positioning slots for movably mounting the catch portion of a respective one of the locking hooks of the first fixing seat;

the first locking seat of the male assembly is secured on the first fixing seat and has a side provided with a plurality of flexible locking pawls
15 each having an outer wall formed with a groove and an inner wall formed with a catch portion;

the retractable rod of the male assembly is movably mounted in the first operation socket and the first fixing seat and has a first end formed with a first annular groove for slidably mounting the catch portion of each of the
20 locking pawls of the first locking seat and a tapered second end formed with a tapered second annular groove;

the female assembly includes a second fixing seat, a second operation socket, and a second locking seat, wherein:

the second fixing seat of the female assembly has a side provided with a plurality of flexible locking hooks each having a distal end formed with
5 a wedge-shaped catch portion;

the second operation socket of the female assembly is mounted on the second fixing seat and has a periphery formed with a plurality of positioning slots for movably mounting the catch portion of a respective one of the locking hooks of the second fixing seat; and

10 the second locking seat of the female assembly is secured on the second fixing seat and has a side provided with a plurality of flexible locking pawls each having an outer wall formed with a groove.

2. The switch device in accordance with claim 1, wherein the first fixing seat of the male assembly has a periphery formed with a plurality of locking recesses, and the first locking seat of the male assembly has a
15 periphery formed with a plurality of positioning lugs each inserted into a respective one of the locking recesses of the first fixing seat.

3. The switch device in accordance with claim 1, wherein the first operation socket of the male assembly has an end face provided with a conical
20 barrel having an inner wall formed with an axial hole and an outer wall formed with a tapered face, and each of the locking pawls of the first locking seat has a

distal end formed with an inclined face rested on the tapered face of the conical barrel of the first operation socket.

4. The switch device in accordance with claim 3, wherein the retractable rod of the male assembly is movably mounted in the conical barrel
5 of the first operation socket.

5. The switch device in accordance with claim 1, wherein the male assembly 1 further includes a C-shaped spring mounted in the groove of each of the locking pawls of the first locking seat for urging each of the locking pawls of the first locking seat radially inward.

10 6. The switch device in accordance with claim 1, wherein the retractable rod of the male assembly has an inside formed with a receiving chamber for receiving a first compression spring which is biased between a wall of the receiving chamber and the first fixing seat.

7. The switch device in accordance with claim 1, wherein the first
15 fixing seat of the male assembly has a side provided with a cylinder, and the retractable rod of the male assembly is movably mounted in the cylinder of the first fixing seat.

8. The switch device in accordance with claim 1, wherein the second fixing seat of the female assembly has a periphery formed with a plurality of
20 locking recesses, and the second locking seat of the female assembly has a periphery formed with a plurality of positioning lugs each inserted into a respective one of the locking recesses of the second fixing seat.

9. The switch device in accordance with claim 1, wherein the second operation socket of the female assembly has an end face provided with a conical barrel having an inner wall formed with an axial hole and an outer wall formed with a tapered face, and each of the locking pawls of the second locking seat has a distal end formed with an inclined face rested on the tapered face of the conical barrel of the second operation socket.

10. The switch device in accordance with claim 1, wherein the female assembly further includes a C-shaped spring mounted in the groove of each of the locking pawls of the second locking seat for urging each of the locking pawls of the second locking seat radially inward.

11. The switch device in accordance with claim 1, wherein the second fixing seat of the female assembly is provided with a cylinder, and the female assembly further includes an urging cap movably mounted in the cylinder of the second fixing seat and rested on the distal end of each of the locking pawls of the second locking seat, and a second compression spring mounted in the cylinder of the second fixing seat and biased between the urging cap and the second fixing seat.

12. The switch device in accordance with claim 1, wherein the inclined face of the distal end of each of the locking pawls of the second locking seat of the female assembly is locked in the second annular groove of the retractable rod of the male assembly.